MAG-TA
Tactical Data Network

Implementation Planning
Conference

2 - 4 Mar 2004

Objective

ADDRESS CONCERNS AND PROMULGATE SPECIFIC GUIDANCE REGARDING IMPLEMENTATIONOF MARINE AIRCRAFT GROUP-TACTICALLY ALIGNED

Agenda

2 Mar

0800 – 0815	Registration/Admin Remarks
0815 - 0830	Opening Remarks (ASL-1)
0830 - 0845	Review Scope of Implementation
0845 - 0930	Review of Objectives & Rqmts
0930 - 0945	Break
0945 - 1045	MAG-TA Architecture (SPAWAR)
1100 - 1230	Lunch
1245 - 1345	1MAW Prototype
1345 - 1400	Break
1400 - 1500	C-4 Issues
1500 – 1600	Stakeholder concerns

Agenda

3 Mar

0800 – 1000	Aviation Obstacles/Rqmts
1000 - 1100	External Network Connection
1100 - 1230	Lunch
1230 – 1330	Shared infrastructure
1330 – 1430	SIPRNET, DMS, PKI
1430 – 1445	Break
1445 – 1500	Identify technical breakout sessions
1500 – 1600	Draft implementation guidance

Agenda

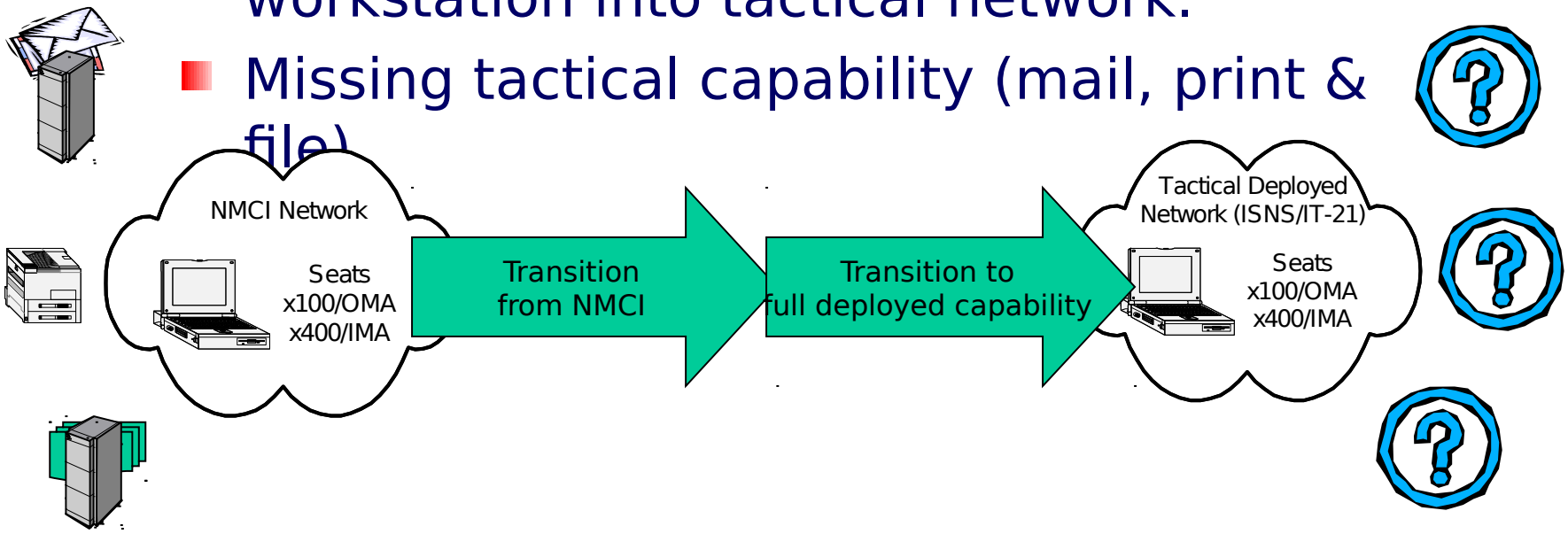
4 Mar

0800 – Rqd Technical Breakouts location TBD

Breakout assumed)	**Participants (fleet**
External network connection	(MCSC, MCNOSC, SPAWAR)
Shared & AOR infrastructure	(MCSC, SPAWAR, AVN)
SIPRNET AVN)	(C4, MCNOSC, SPAWAR,
DMS	(C4, MCNOSC, AVN)
PKI AVN)	(C4, MCNOSC, SPAWAR,

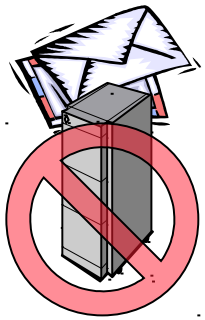
AVN - NMCI Challenges

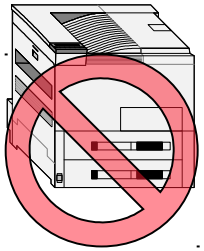
- Lead time to deploy (Up to 4 days for seat administrative access).
- Hands on configuration for each workstation into tactical network.
- Missing tactical capability (mail, print & file)

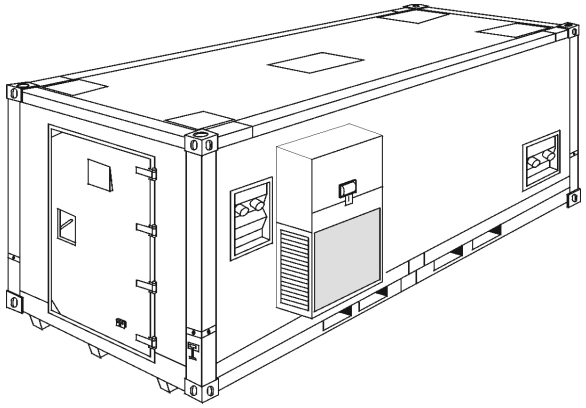


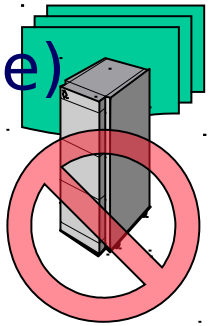
AVN - NMCI Challenges

- Will not support tactical enclosures, Mobile Facilities (MF's).
- No seat services (mail, print & file)



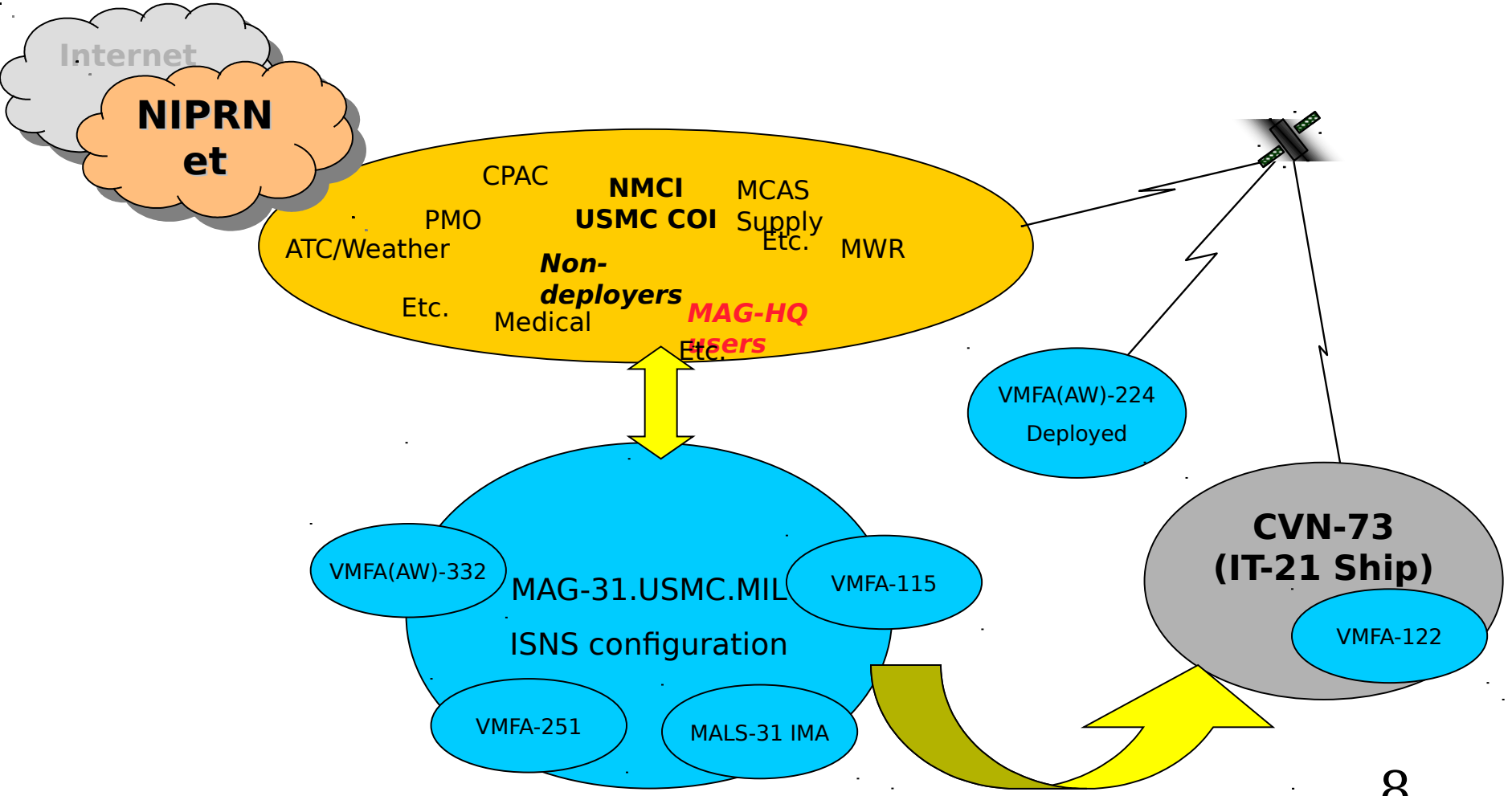




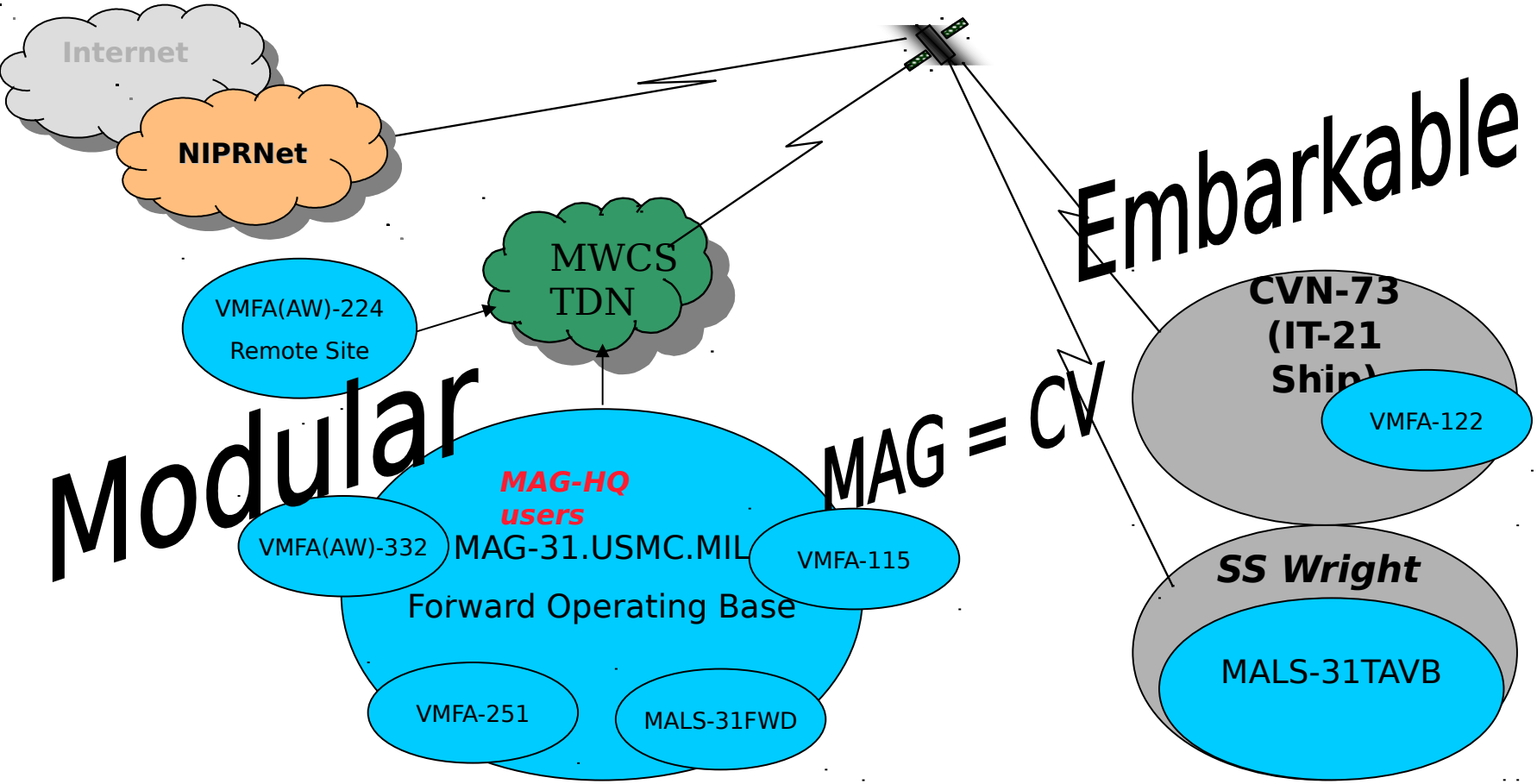


"Network infrastructure and seat services in tactical enclosures such as Mobile Facilities is not within the scope of the contract."

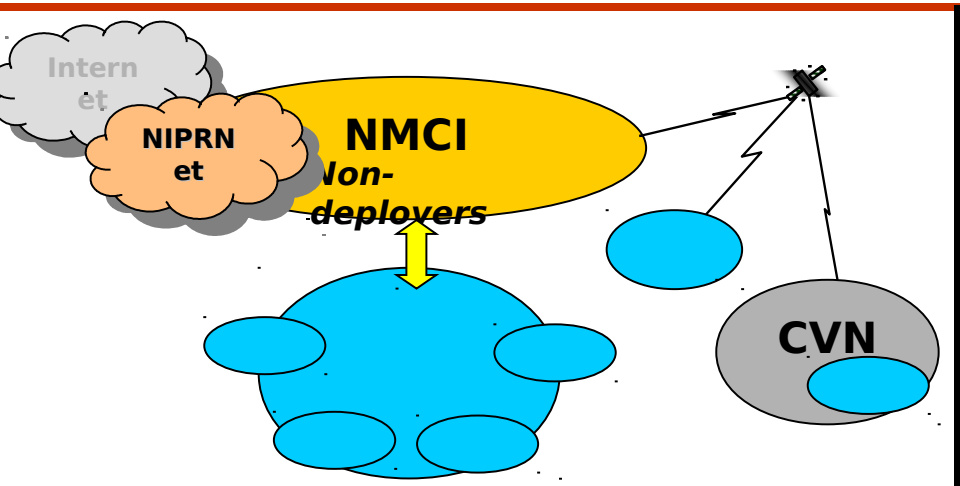
MAG-TA - Garrison

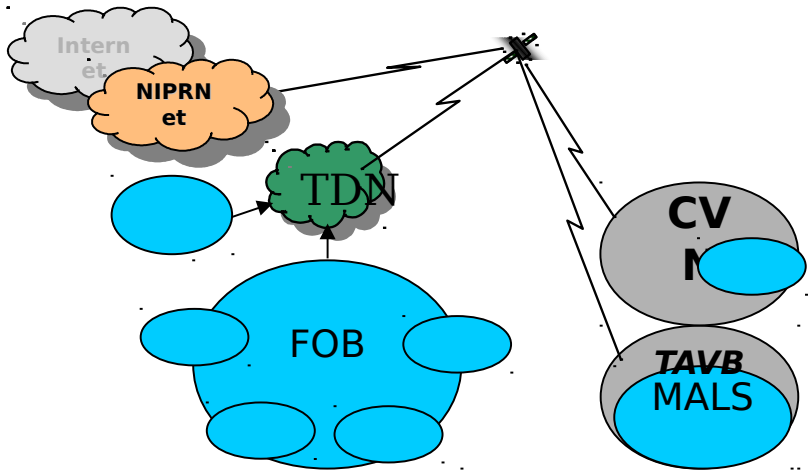


MAG-TA - Deployed



Tactically Aligned MAG-TA Train as we Fight!





Pro

- Full Mobile Facility Support
- Full tactical infrastructure for OMA/MALS
- Consistent user environment OMA/MALS
- Fully plug & play on ISNS afloat
- Postured for Sea Basing
- Maintain MOS competency

Con

- No enterprise seat management
- Infrastructure must be maintained in garrison
- Additional costs for tactical capability
- Lead time transition for MAG HQ seats

Scope of implementation

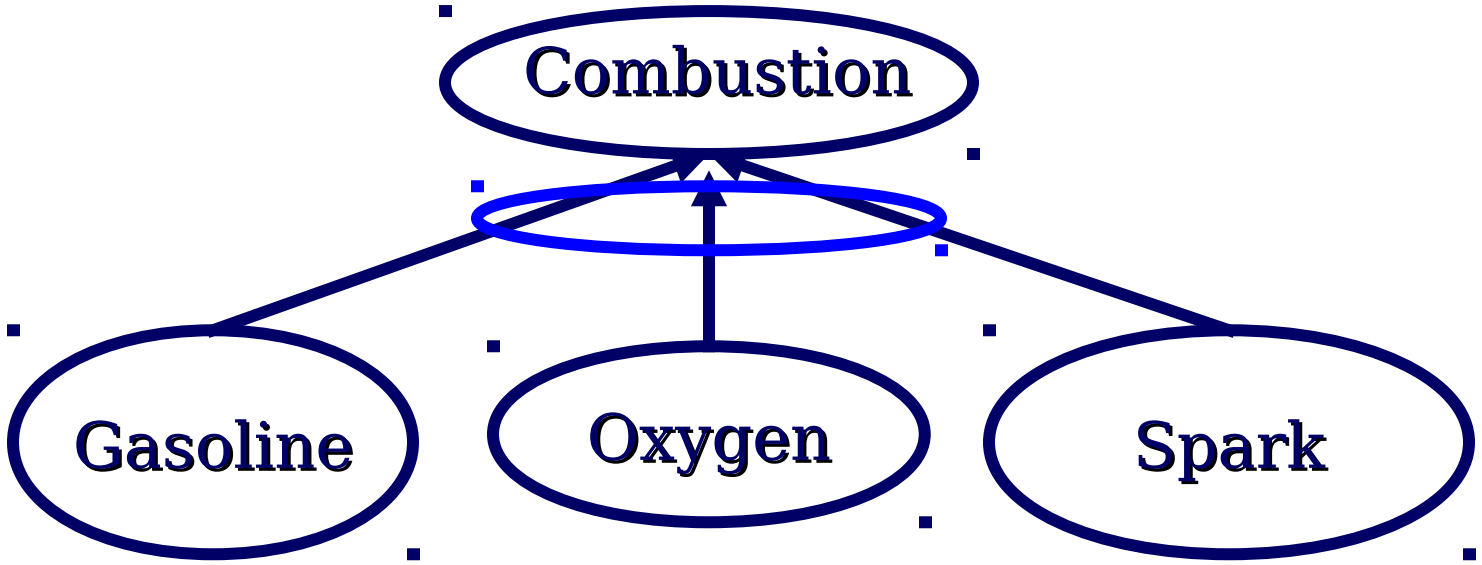
- Per 061621Z OCT 03 CMC WASHINGTON DC AVN ASL

  “THE SCOPE OF THIS TRANSITION ENCOMPASSES ACTIVE OPERATIONAL FLYING (OMA) AND LOGISTICS (IMA) SQUADRONS ONLY.”

Logical Analysis

- Apply logical analysis of the objectives, requirements and capabilities of the MAG-TA concept.
- Cause and Effect "If this…and this…and that… then the objective will be met."
- Forces the focus on the actual constrain vice the perceived constraint.

Logical Analysis



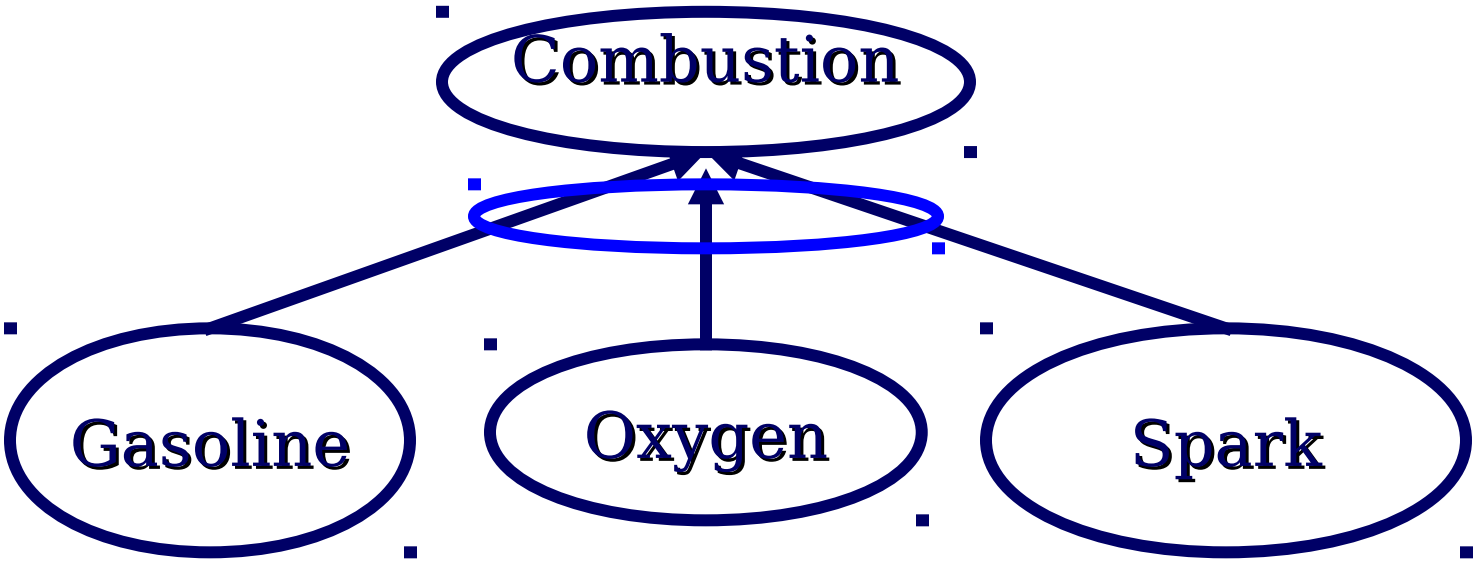
If I Have Gasoline
and I Have Spark

Then I Will Have
Combustion

Is This Missing

Is NOT Missing

Logical Analysis



A Logic Tree Must Contain Elements That are Both Necessary and Sufficient

Each Element in Isolation is Necessary

But They are Not Sufficient to Achieve Combustion

Necessary and Sufficient Elements are Present

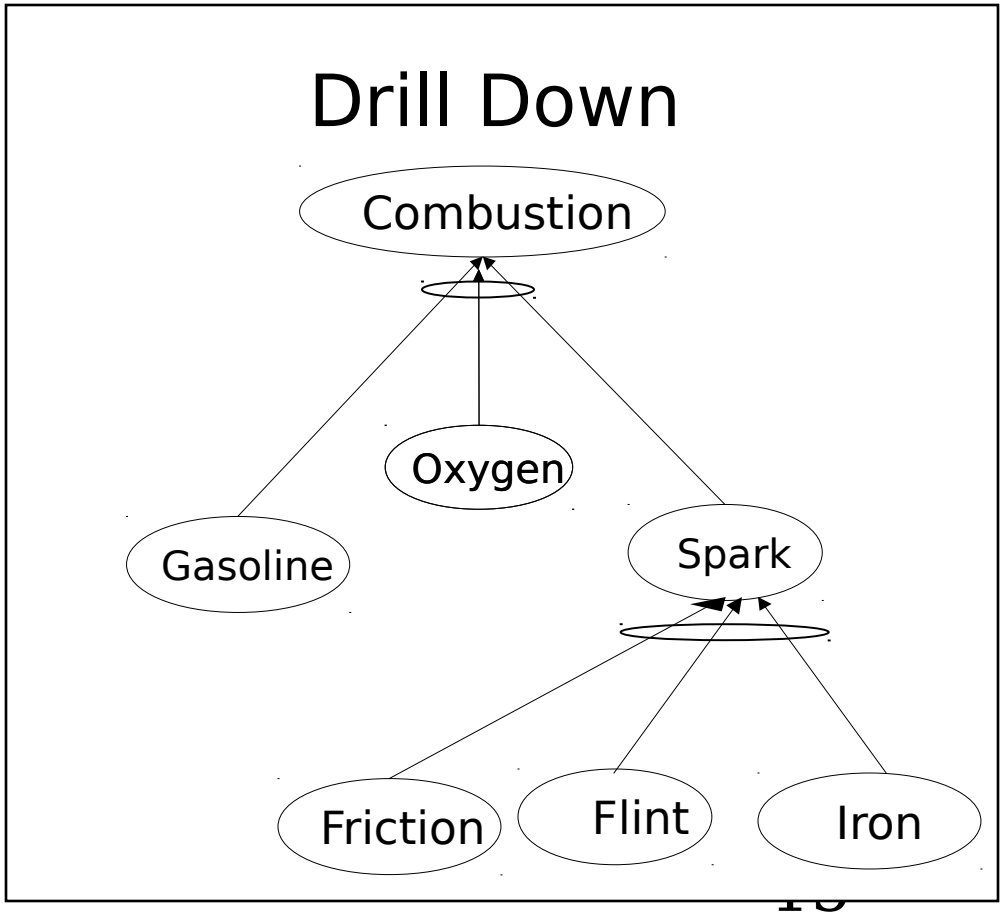
Logical Analysis

Drill Down the Logic Tree…

Drilled Down to the Smallest Degree That Makes Common Sense

In Relationship to The Goal

Drill Down to the Point Where You Can Identify Those Elements That are Both Necessary and Sufficient



Logical Analysis

Validation …

Does the Logic Tree you Developed Make Sense?

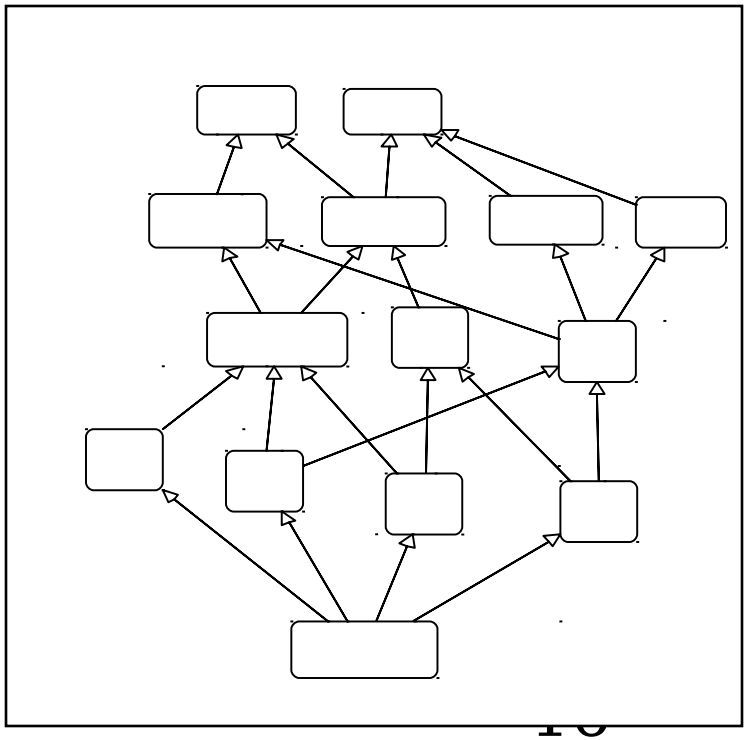
Let Someone Else go Over it

Is it Simple and Clear?

Does it Lead Your way to the Goal?

Be Very Critical !!!

This is Your Roadmap to Success



Logical Analysis

MAG – TA
Tactical Data Network

Back-Up Slides

Frequently Asked Questions

Q: Why is the ACE any different from GCE or CSSE?

A: Aviation has a much higher concentration of IT systems and automation requirements.

Safety of flight dictates comprehensive and automated maintenance and material procedures.

Tight integration with Naval Aviation makes ISNS configuration a logical fit.

Q: Naval Air Stations are implementing NMCI. What makes a Marine Aircraft Group different?

A: Naval Intermediate Maintenance Activities do not deploy in part or in whole. All tactical IMA is aboard CV (in ISNS network).

Navy squadrons do not tether to the ACF.

Navy OMA deployment has proven to be a challenge in NMCI. (ESIT)

Frequently Asked Questions

Q: Isn't MAG-TA just a way out of NMCI?

A: The MAG-TA TDN concept is the adoption of a proven *Tactical* ISNS configuration, standard on all deploying Navy vessels.

ISNS will evolve into the Sea Basing infrastructure component of ForceNet.

The USMC COI provides for the connection of trusted external networks to support TDN's or other special requirements.

Q: What are the peculiar deployment requirements of aviation that NMCI cannot meet?

A: Certainly the NMCI embarkable seats can be deployed in support of military operations. However ISF is contractually obligated to only facilitate the transition out of the NMCI network.

ISF has up to four days to provide administrative capability (admin passwords) required to integrate into tactical network.

ISF is not responsible for data loss associated with the transition out or upon return.

Frequently Asked Questions

Q: Why wouldn't you want to leverage the cost and labor savings of NMCI?

A: NMCI does not remove the requirement to fund and provide deployable/tactical network services, infrastructure and support (servers, printer, etc.).

The labor savings only applies to the non-deploying supporting establishment. Deployers must maintain support personnel with the additional challenge of keeping them proficient.

Q: When is the last time you had to deploy a MALS or MEF? (This question was asked several times last year!)

A: Ask I MEF.

Misconceptions, Misinformation & Myths

M: MAG-TA is a garrison solution, not a tactical network

F: There will certainly be garrison bound components (cable and switches).

F: Overall architecture is a flexible, mobile configuration in a tactical posture.

F: Supports transparent decoupling of OMA and supporting IMA components for rapid transition to an afloat for fwd deployed environment.

F: Aligned with the IT-21 ISNS environment which will permit rapid integration and robust interoperability.

F: ***Seabasing and ForceNet enabler!!***

Misconceptions, Misinformation & Myths

M: MAG-TA does not support classified networks.

F: The MAG-TA cost model and architect supports 5/10 hardened drops per OMA/IMA.

F: Currently SIPR services (mail, file & web) are not included.

F: Intent is to complement not replace MC TDN. Proposed solution is to establish SIPR enclave in secure facility providing services across MAG-TA infrastructure to designated seats.

Misconceptions, Misinformation & Myths

M: MAG-TA has no connection…connection has not been defined…MCNOSC cannot support connection… connection cannot support x.400…etc.

F: Two years ago, aviation identified external network connection requirement to MCSC. Over the past 18 months aviation, MCSC, MCNOSC & EDS have developed a technical connection solution for a variety of legacy enclaves within the USMC COI.

F: The technical proposal for the 189 external network connections defined by MCSC is being reviewed by EDS.

F: “MCNOSC as the DAA agent will not disconnect aviation.”

Misconceptions, Misinformation & Myths

M: SPAWAR doesn't know anything about MAG-TA and has not agreed to support it.

F: LtGen Hough formally asked SPAWAR (Admiral Slaught & Dennis Bauman) to support the development of this solution. (DC-AVN ltr of intent of 1 Aug 03)

F: MAG-TA is not a new POR. Enhanced capabilities & requirements from existing PORs.

F: Currently unfunded requirement.

F: PMW-151 & PMW-165 are aware of aviation intent and are assisting in configuration to meet our requirement.

Misconceptions, Misinformation & Myths

M: MAG-TA has no formal Concept of Operations, configuration, or mission capabilities documentation.

F: CONOPS in draft needs G6 scrub.

F: Draft ORD needs to be reformatted as ICD.

F: Effective documentation will only possible with coordination, cooperation and commitment.

F: HQMC cannot & will not hand you a canned solution.

Misconceptions, Misinformation & Myths

M: There will be multiple networks installed on each air station.

F: There never have been duplicate networks. Once SPAWAR installs the network in ground infrastructure is the property of the MCB.

F: The expectation is ‘right of passage over shared infrastructure”.

Misconceptions, Misinformation & Myths

M: MAG-TA may not be interoperable with NMCI.

F: MAG-TA will be as interoperable as any other open standards (IP) based network.

F: MAG-TA is an opportunity to develop more closely integrated MCEN/IT-21 solutions.

Misconceptions, Misinformation & Myths

M: We cannot afford to do MAG-TA…there is no funding…who will pay…

F: Aviation has $18m submission for POM-06 CAT-A.

F: DC-AVN has clearly stated his commitment to MAG-TA.

F: Getting to FY06 will require careful management of various resources: (Current NTCSS POR, AIR TYCOM installations and unexecuted funding, Existing Blue TBA support funding).

F: NMCI can only field 80% workstation requirement

F: Shortfall of tactical capability under NMCI.

Misconceptions, Misinformation & Myths

M: NMCI “owns” all the infrastructure…there’s not enough fiber…etc.

F: Per Dep PM NMCI, MCSC the govt is obligated to turn over to the contractor only that infrastructure required to provide the contracted services.

F: If there are no transitioning users in a hangar, the govt can retain all infrastructure in that building to include cable and edge devices.

F: Shared infrastructure is a fact of life. MAG-TA is one of many GFE systems (fire alarms, IDS, voice, etc.).

Misconceptions, Misinformation & Myths

M: MAG-TA will not be accredited, managed, secure, etc.

F: MAG-TA will be accredited, managed IAW the same guidance any other TDN.

F: Management will be IAW orders and guidance currently in place and to be developed peculiar to MAG-TA.

F: DITSCAP Accreditation is clearly defined in DOD Instructions.

Misconceptions, Misinformation & Myths

M: NMCI will deliver all required capabilities

F: The only tactical capability NMCI delivers is the seat.

F: Less than 80% of MARS seat requirements can be funded.

F: NMCI has failed to meet majority of of SLA's

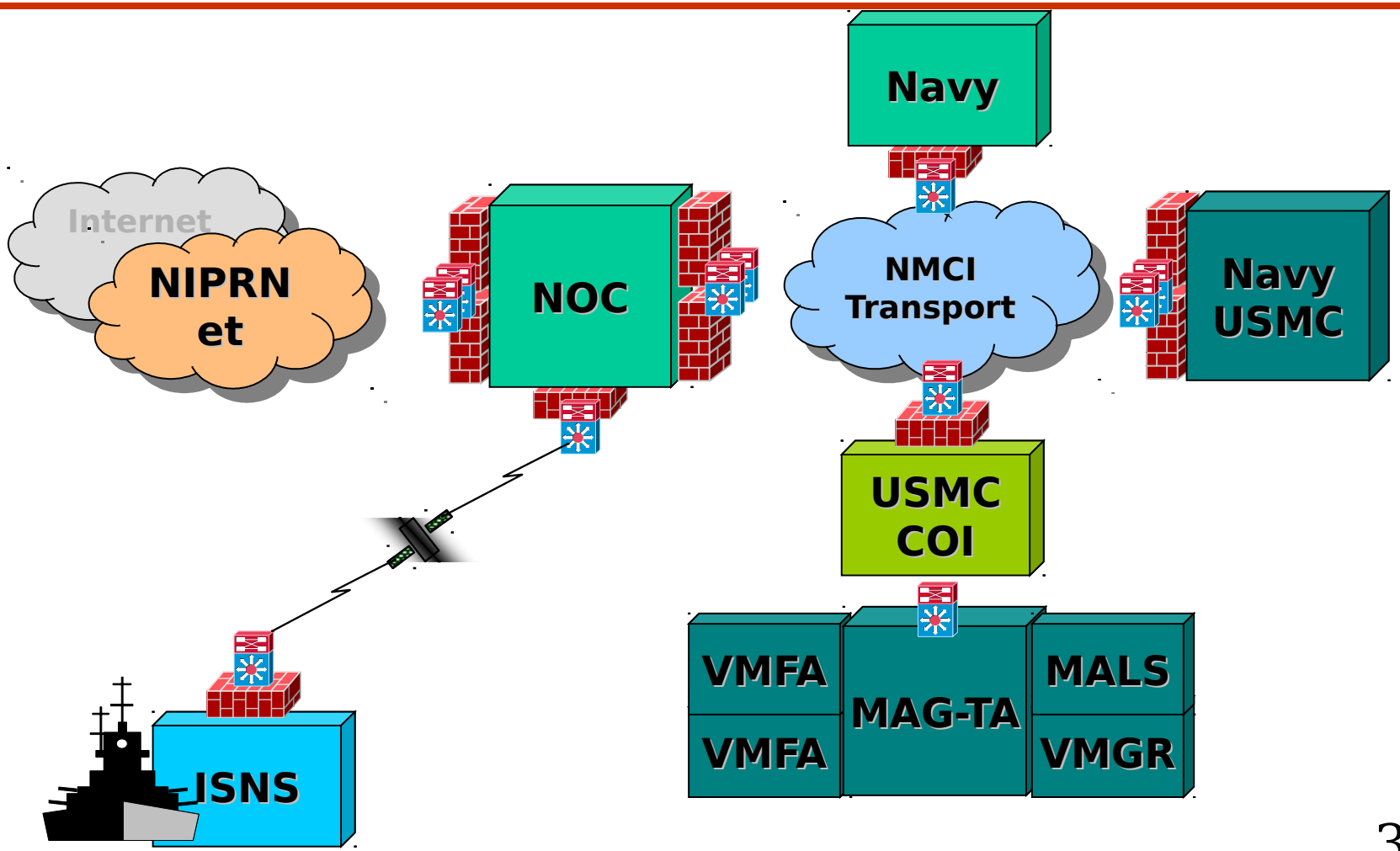
F: C4 is initiating the MCEITS program to provide enterprise level applications hosting, data storage, and collaborative tools.

F: Due to capability shortfalls, numerous other communities are pursuing external network waivers similar to MAG-TA (TECOM, MCRC, HMX-1, etc.).

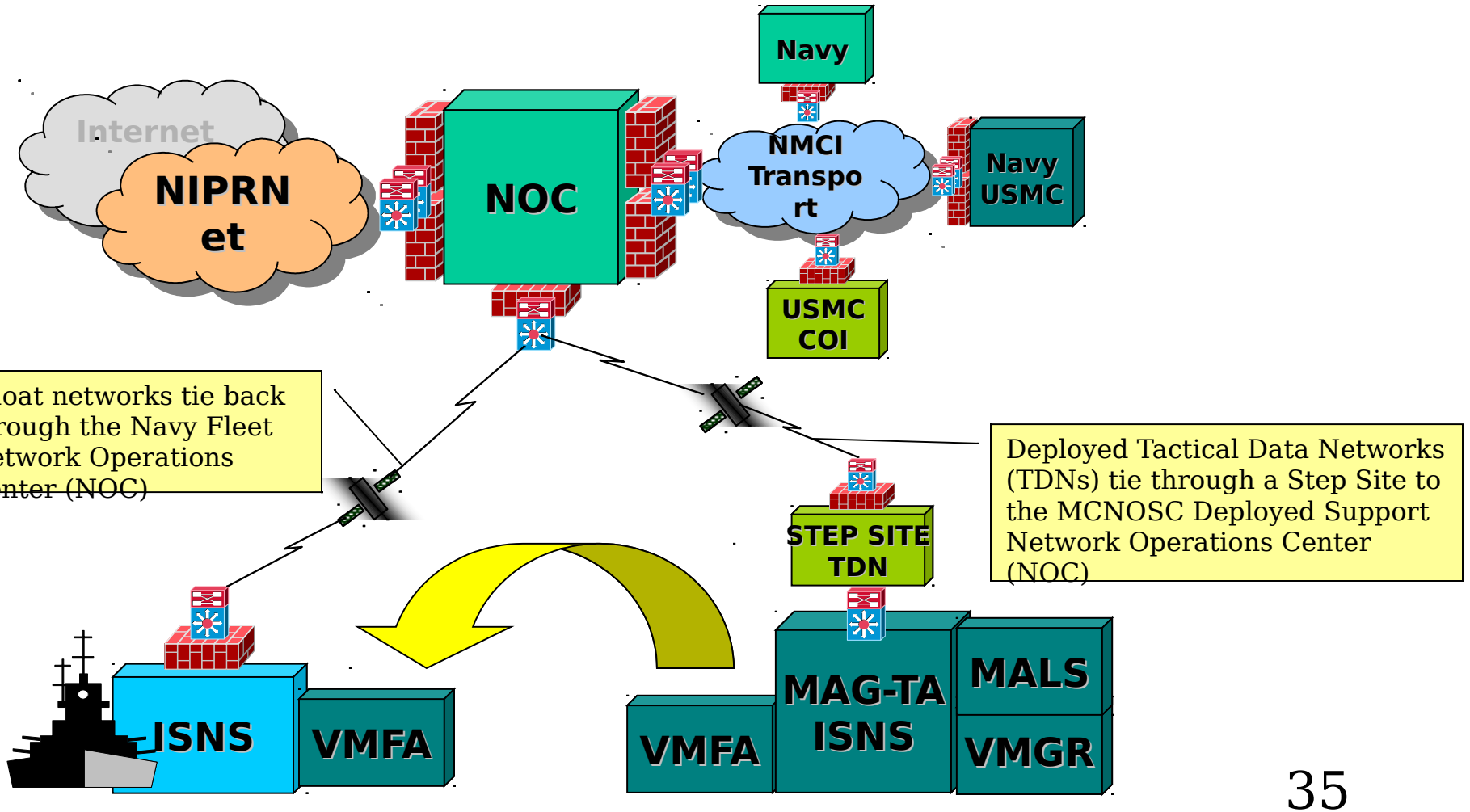
Issues

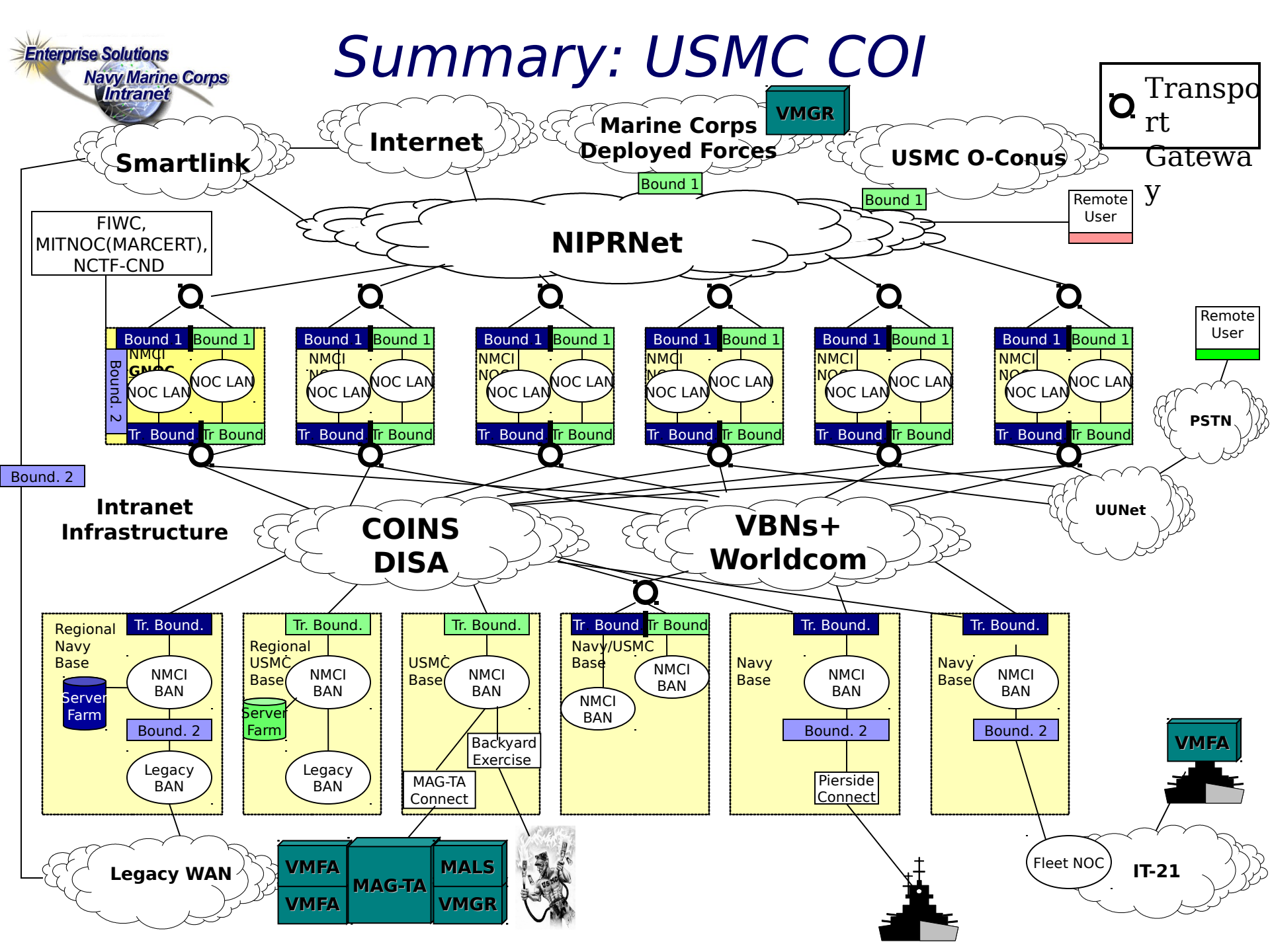
- MAG-TA is not certified and approved
- No standardized configuration for MAG-TA
- There is no expertise to support MAG-TA
- IAVA non-compliance in the MAG will create a security risk
- MAG-TA will provide no RAS capability, no OWA
- H/W refresh seats get no PUK support

Security Architecture (Garrison)



Security Architecture (Deployed)




Enterprise Solutions
Navy Marine Corps Intranet
Summary: USMC COI
Transport Gateway
Smartlink
Internet
Marine Corps Deployed Forces
VMGR
USMC O-Conus
Bound 1
Remote User
NIPRNet
FIWC, MITNOC(MARCERT), NCTF-CND
Bound 1
Bound 2
NMCI GNOC
NOC LAN
Tr Bound
Remote User
PSTN
UUNet
Bound. 2
Intranet Infrastructure
COINS DISA
VBNs+ Worldcom
Regional Navy Base
Tr. Bound.
NMCI BAN
Server Farm
Bound. 2
Legacy BAN
Regional USMC Base
USMC Base
Navy/USMC Base
Navy Base
Backyard Exercise
MAG-TA Connect
Pierside Connect
Legacy WAN
VMFA
MAG-TA
MALS
VMGR
Fleet NOC
IT-21